

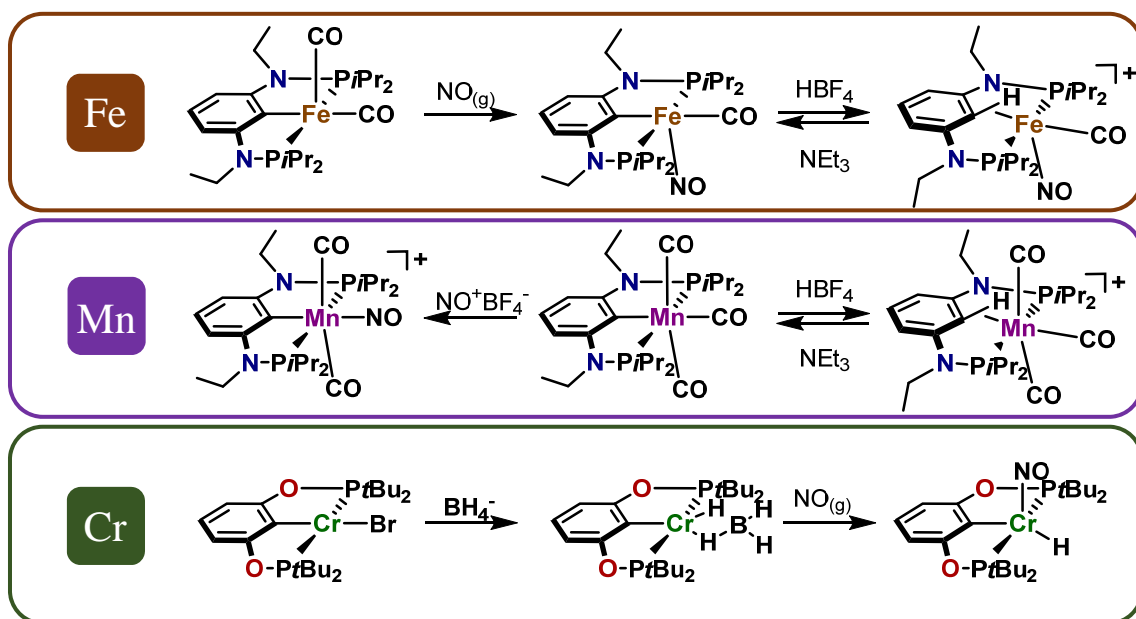
Synthesis of PCP pincer complexes with non-precious metals

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Pincer ligands adopting a meridional geometry are excellent candidates to change the electronic properties of the metal center in a controlled manner and are thus often used as easily tunable catalysts for many organic reactions. In this work the synthesis, characterization and chemical properties of iron, manganese and chromium PCP pincer complexes is reported. In particular, the reactivity of these compounds towards NO and NO⁺ is described. By using *tert*-butylphosphine instead of *iso*-propyl phosphine moieties, it was possible to synthesize a highly reactive unsaturated twelve electron [Cr(POCOP^tBu)Br] pincer complex with four unpaired electrons [1-3].



[1] Himmelbauer, D.; Mastalir, M.; Stöger, B.; Veiros, L.; Kirchner, K. *Organometallics*, **2018**, *37*, 3631-3638.

[2] Himmelbauer, D.; Stöger, B.; Veiros, L.; Kirchner, K. *Organometallics*, **2018**, *37*, 3475-3479.

[3] Himmelbauer, D.; Mastalir, M.; Stöger, B.; Veiros, L.; Pignitter, M.; Somoza, V.; Kirchner, K. *Inorg. Chem.*, **2018**, *57*, 7925-7931